

Remarks: A form more or less intermediate in coloration between *L. c. barbouri* and *farnumi* though exhibiting several characters more or less peculiar to itself. It is far more globose than any other form found at Pinecrest and possesses comparatively little mottling of color between the bands of mahogany brown.

Pinecrest is the remnant of a road construction camp established during the construction of the "Tamiami Trail", and today consists of a few houses, a store, and a series of tomato farms. Pinecrest is 46 miles nearly due west of Miami. With two exceptions, all collections were made in hammocks within an area of 7 mi. E of Pinecrest. The two exceptions are a small hammock $\frac{1}{4}$ mi. W and another about 3 mi. SW.

The subspecies herein described were based upon material collected by J. N. Farnum, of Miami, Florida, whose large collection is now possessed by the Museum of Comparative Zoology, and upon collections made by N. W. Lermond and the writer during the latter part of February and the first of March of this year.

SOME PREVIOUSLY UNPUBLISHED FIGURES OF TYPE MOLLUSKS FROM CALIFORNIA

BY LIONEL WILLIAM WIEDEY

A number of species of marine mollusks from the Cretaceous and Tertiary strata of central California have been briefly described, but not figured, by E. B. Hall and A. W. Ambrose.¹ These species were collected in the Mount Hamilton Range and adjoining ranges on the eastern side of San Francisco Bay.

It is generally recognized that the practice of describing species without their being figured is to be severely condemned. Moreover, such an unfortunate procedure im-

¹ Nautilus, Vol. 30, No. 6, 1916, p. 68; No. 7, 1916, p. 77.

pedes the further scientific progress in this direction of all but those few to whom the types are available. Since species so described are considered to have recognized standing, the writer believes it essential that the descriptions of these species be completed by making available figures of them, inasmuch as they, in their present status, are nearly valueless to those who study marine faunas from this region of the ages represented by these unfigured forms.

Enlargement upon the original brief descriptions and discussions is not here undertaken. The figures will suffice to permit subsequent writers to make such disposition of them as they deem expedient. However, notes kindly furnished by Mr. F. M. Anderson on some of the Cretaceous species are incorporated in full. The types are in the Paleontology Collection of Stanford University.

New type numbers and new locality numbers have been given each of the forms described by Hall and Ambrose in order to conform with other species described from the Stanford collections in the Department of Geology.

AVICULA GREGORYI Hall and Ambrose, Pl. I, fig. 1.

Hall, E. B., and Ambrose, A. W., Nautilus, Vol. 30, No. 6, 1916, p. 69.

The type of this species was collected from Horsetown strata, middle Cretaceous, at a locality one and one-half miles south and a little west of Carnegie, Tesla quadrangle.

OSTREA TITAN Conrad, var. PERRINI Hall and Ambrose. Pl. III, fig. 1.

Hall, E. B., and Ambrose, A. W., Nautilus, Vol. 30, No. 7, 1916, p. 80.

This form was declared to occur abundantly in the Briones formation, middle Miocene, in the Tesla, Pleasanton, San Jose, and Mt. Hamilton quadrangles.

PECTEN CLARKENSIS Hall and Ambrose.¹ Pl. II, fig. 3.

Hall, E. B., and Ambrose, A. W., Nautilus, Vol. 30, No. 6, 1916, p. 68.

This very small specimen was collected at a locality two and one-half miles northeast of the town of Milpitas, San Jose quadrangle, in Horsetown beds, middle Cretaceous.

PECTEN TOLMANI Hall and Ambrose. Pl. I, fig. 2.

Hall, E. B., and Ambrose, A. W., Nautilus, Vol. 30, No. 7, 1916, p. 82—Trask, P. D., Univ. of Calif. Publ., Bull. Dept. Geol. Sci., Vol. 13, No. 5, 1922, p. 139, etc., pl. 3, figs. 1 and 3.

This species was stated to have been collected in the Briones formation, middle Miocene, in the Tesla, Pleasanton, San Jose, and Mt. Hamilton quadrangles. At a somewhat later date Trask found this species to be quite characteristic of the Briones formation. Another statement in the original description adds that its horizon is probably Monterey, lower Miocene. The work of subsequent writers seems to have demonstrated that the designation of the Briones as its horizon was the correct one.

PHOLADOMYA HARRIGANI Hall and Ambrose. Pl. I, fig. 5.

Hall, E. B., and Ambrose, A. W., Nautilus, Vol. 30, No. 7, 1916, p. 77.

Mr. F. M. Anderson declares that "this form is notable for its close resemblance to an undescribed form found at Horsetown, Shasta County, which is a distinct species of smaller size, with finer ribs on the anterior half of the shell. The otherwise close resemblance may be taken as indicating stratigraphic difference. But in view of the fact that its horizon is not far removed from that of *Schloenbachia templetoni*, it seems probable that it should be regarded as a lower Chico form."

¹ Hanna (Proc. Calif. Acad. Sci., 1st Ser., Vol. 13, No. 10, 1924 p. 176) suggested this name might be preoccupied but the differences in spelling in the two species names involved clearly eliminates that possibility.

This species was said to have been collected in upper Chico, upper Cretaceous.

MACOMA WILCOXI Hall and Ambrose. Pl. I, fig. 4.

Hall, E. B., and Ambrose, A. W., Nautilus, Vol. 30, No. 7, 1916, p. 81.

This species was declared to have been secured in the Briones formation, middle Miocene, in the Tesla quadrangle, near Livermore and near Dublin.

MACTRA BEALI Hall and Ambrose. Pl. I, fig. 3.

Hall, E. B., and Ambrose, A. W., Nautilus, Vol. 30, No. 7, 1916, p. 80.

This species of *Mactra* was said to have been collected from the Monterey sandstone, lower Miocene, in the Pleasanton quadrangle.

MESODESMA PACIFICA Hall and Ambrose.

Hall, E. B., and Ambrose, A. W., Nautilus, Vol. 30, No. 7, 1916, p. 79.

Myadesma pacifica (Hall and Ambrose), Clark, Bruce L., Univ. of Calif. Publ., Bull. Dept. Geol. Sci., Vol. 14, No. 4, 1922, p. 118, pl. 13, fig. 5.

This unusual species was one of a group of three which Clark later chose to represent his new genus *Myadesma*. The type of the species was collected from the Monterey sandstone, lower Miocene, in the Pleasanton quadrangle, near the town of Sunol. The new type number is 513, and the new locality number is 813.

PANOPEA SMITHII Hall and Ambrose. Pl. II, fig. 1.

Hall, E. B., and Ambrose, A. W., Nautilus, Vol. 30, No. 7, 1916, p. 79.

This species was collected from the Tejon, upper Eocene, in Corral Hollow, near Livermore, in the Tesla quadrangle.

ATAPHRUS PEMBERTONI Hall and Ambrose. Pl. I, fig. 7.

Hall, E. B., and Ambrose, A. W., Nautilus, Vol. 30, No. 6, 1916, p. 70.

This small form was declared to have been collected from the Chico formation, upper Cretaceous, in the Arroyo del Valle, Tesla quadrangle.

CERITHIUM ? TESLAENSIS Hanna. Pl. I, fig. 6.

Cerithium branneri Hall and Ambrose, Nautilus, Vol. 30, No. 6, 1916, p. 70. NOT *Cerithium branneri* White, Arch. Mus. Nat. Rio de Janeiro, Vol. 8, 1887, p. 153.

Cerithium ? teslaensis Hanna, Proc. Calif. Acad. Sci., 4th Ser., Vol. 13, No. 10, 1924, p. 162; new name proposed.

Cerithium branneri was said to have been collected from the Chico formation, upper Cretaceous, one mile north-northwest of Tesla and Corral Hollow, Tesla quadrangle.

SONNERATIA ROGERSI Hall and Ambrose. Pl. II, fig. 2.

Hall, E. B., and Ambrose, A. W., Nautilus, Vol. 30, No. 6, 1916, p. 69.

Mr. F. M. Anderson remarks about this species that "an examination of the holotype of this species proves it to be a form nearly allied to, but also distinct from, *Sonneratia stantoni* from the upper Cretaceous of Horsetown, Shasta County, California. In the description of the species the suture is not mentioned, but on the specimen itself it can be seen, and the septation differs in no important respects from that of *S. stantoni* as shown in the Proc. Calif. Acad. Sci., Vol. 2, 1902, pl. 10, fig. 198. I am disposed to think that this horizon is near the top of the Horsetown group."

The specimen was originally declared to have been collected from the Horsetown, middle Cretaceous.

SCHLOENBACHIA TEMPLETONI Hall and Ambrose. Pl. II, fig. 4.

Hall, E. B., and Ambrose, A. W., Nautilus, Vol. 30, No. 7, 1916, p. 78.

Concerning this species, Mr. F. M. Anderson remarks that "this form is worthy of especial notice on account of its size and form. No dimensions of the holotype are given in its description, except the diameter of the last whorl,

which is 160 mm. This is somewhat below the facts, although the specimen is a little crushed and the diameter thereby increased. The ratio of the diameter of the whorl to that of the umbilicus is about 3.7:1. In respect to this ratio, as well as in the character and number of the ribs, and in other features (not including the septa) the form approaches very near to *Schloenbachia propinqua* (Stoliczka) from the Ootatoor group of southern India. As far as the septa on the California species can be seen, the resemblance holds true. The horizon from which the sample was obtained is probably the lower Chico, rather than the upper Chico as stated by the authors."

DESCRIPTION OF TWO NEW SPECIES OF MOLLUSCS FROM THE WEST COAST OF NORTH AMERICA

BY G. WILLETT

TURBONILLA (STRIOTURBONILLA) CAYUCOSENSIS, new species. Pl. 3, figs. 2, 3.

Shell large, broadly elongate-conic, bluish-white in younger specimens, yellowish-white in adults. Nuclear whorls small, rounded, having their axis at right angles to the succeeding turns. Post-nuclear whorls somewhat flattened and shouldered at the summits. Surface marked by heavy, rounded, closely spaced, strongly protractive axial ribs, of which fourteen occur on each of the first eight whorls, sixteen on the ninth and tenth, eighteen on the eleventh, and twenty on the twelfth and last whorl. These ribs extend from the summit of the whorl to the periphery, where they merge and terminate. Intercostal spaces a little narrower than the ribs, also terminating at the periphery. On the type and other adult specimens the axial ribs extend over the base, becoming more or less feeble and uneven on the anterior portion. In immature specimens (ten whorls or less) the ribs terminate at the periphery. Entire